30 II

1949-50 **File No. 8340/36**

P. W. **DEPARTMENT**

B CLASS

El. **BRANCH**

Subject:— Hydro Electric Project-
Kalindi

IV

File No 8340/36-El.
Part II

Std. Sectt. Slip 24-B

G. M. G. P., No. 2403, dated [illegible] Bodt. 584 a

DOCKET SHEET (B)

II

Subject:—

Kalinadi development at Supa.

File No. 8340/36/1642 3

P. W. DEPT.

Electric BRANCH.

References:—

Date.	To whom sent.	Notes and instructions.
31/3/49	G.S.	Issue u.o. to Fin Deptt (with file no 8340/36 & ~~[illegible]~~ one copy of report) (1.5.49)
12/5/49	Regr.	Pl. return u.o. to P.W.D (with file 8340/36 & one copy of this report)
12.5.49	El.	
25/5/49	G.S.	Issue u.o. to R.C.D. X (with file no 8340/36 & report) (10.6.49)
27/5/49	Regr (P.W.D) Urgent	Return u.o. to ~~E~~ P.W.D X. with flag at 'X' Time:- 1-15. 27/5 27/5
1/6/49	G.S.	Issue letter & endt on p.17 & place with three spare copies [illegible]. Keep o.c. [illegible]
10/6/49	File Mr	Please open part II & return

G. R., G-D., No. 2408, dated 22-6-22.]

Std. Sectt. 78 a.

DOCKET SHEET

Subject:—

File No. 8340/36 II

P. W DEPT.

El BRANCH.

References:—

Date.	To whom sent.	Notes and instructions.
11/6/49	Fil Br	Awaited (15-7-49)
9/1/50		" . (3.2.50)
26/1		Fil (A)

ASSOCIATED CONSULTING ENGINEERS (INDIA)

534, SANDHURST ROAD,
(Near the Bridge)
BOMBAY 7.

Our Ref. ACE/113/190/

27th January, 1949.

The Electrical Commissioner with
the Government of Bombay,
Electric Grid Offices,
Foreshore Road,
Bombay.

Dear Sir,

KALINADI HYDRO ELECTRIC SCHEME.

As promised at our meeting with you on Monday, we enclose herewith a graph drawing No.ACE/113/B/56 showing the cost per KW against the design load factor for various hydro-electric schemes with which we are concerned in Scotland and Africa together with certain figures relating to the Kalinadi scheme for comparison.

You will see that for the complete Kalinadi scheme on any load factor the cost per KW is extremely low and, in fact, the complete scheme is an extremely attractive one. As far as the initial developments are concerned both Supa and Kaneri developed separately lie very close to the mean curve. For the reasons mentioned in the engineering report, however, we consider that the first scheme to be examined in detail should be Supa.

We would draw your attention again to the fact that in estimating the cost of energy we have based our figures on the firm output which could be relied upon during a year of exceptionally low rainfall. This is a very conservative way of computing the cost since in 75% of the years the rainfall may be expected to be not less than 90% of the long average. In these years, therefore, the electrical output available would exceed the long term firm output as quoted in the report by not less than 20% and it is possible that such surplus power, although not wholly dependable, might find a useful outlet in certain types of industry.

In countries which are highly developed the dislocation due to electrical shut down is so great that only firm power can be considered when assessing the economics of a hydro-electric or thermal scheme. In India at the present stage of development, however, we do not consider this to be quite so important because the country is not so dependent on an absolutely unfailing supply of electricity. It should be possible to arrange distribution so that less important consumers could be cut out when the maximum demand could not be met. In fact we consider that it is unfair to place too much stress on the lowest firm power which could only be developed in the very driest years and to forget the normal year when the economics of the scheme are much more attractive. If the conditions for 75% of the time are considered the cost of generation will be reduced by at least 20%, i.e. to 0.244 annas per unit.

P.T.O.

You have explained to us that further site work could not start until after the 1949 monsoon, but we would point out that it is desirable that arrangements should be made for further river gauging during the 1949 monsoon. If preparations can be made well in advance of the monsoon, better results can be obtained than last year and over a wider river stage. The water level gauges which can be only regarded as semi permanent should be replaced by more permanent structures with water levels marked on enamel plates which are more permanent and more easily read. It is also essential to ensure that the present records are continued without a break.

Yours faithfully,
For ASSOCIATED CONSULTING ENGINEERS (INDIA)

Sd/-

A.C. Fielding, Chief Engineer.

KNK/12.2.

No. ELG 12-D/ 3855
Electric Grid Offices, Foreshore Road,
Bombay 1, 5th March, 1949.

To

7

The Secretary to Government,
Public Works Department,
Bombay.

Subject: HYDRO ELECTRIC RESOURCES OF THE KALINADI BASIN
REPORT BY MESSRS. ASSOCIATED CONSULTING ENGINEERS
(INDIA).

X 8870 A
File 8340/36
p195

& kept below

In continuation of my u.o.r. No.Elg.12-D/386, of 6th January, 1949, I enclose herewith a copy of the final Report on the Hydro Electric Resources of the Kalinadi Basin submitted by Messrs. Associated Consulting Engineers (India) and a copy of their letter No.ACE/113, dated 27-1-1949, comparing favourably the Kalinadi development with other schemes in Scotland and Africa for which this firm are Consultants.

2. According to the report, the area of the Kalinadi basin most suitable for hydro power development comprises about 1440 sq. miles from the border of Portuguese Goa in the north to Bogrigadde near Yellapur (all in Kanara District) covering about 70 miles of the Kalinadi River Course. According to the Triennial report of the Hydro Electric Survey of India, 1921, this area for development was of the order of 710 sq. miles only.

3. On pages 8 to 17 of the Report of the Associated Consulting Engineers, a brief summary of the conclusions reached after site investigations and study of the contour plans derived by Aerial Surveys, data on the topography, Geology and Hydrology of this basin, are given.

4. The consultants are of the opinion that large blocks of power could be economically generated at the following generating stations :

(i) Supa, (ii) Nagjhiri, (iii) Kaneri, and (iv) Lower Kalinadi stations, three of which would be situated on the Kalinadi and one on Kaneri, a tributary of the Kalinadi. The lake formed by the dam at Supa would be the main regulating reservoir, on which depends the power generation at the three stations at Supa, Nagjhiri and Lower Kalinadi. The Kaneri project is an independent scheme, but as its storage possibilities are limited, its power possibilities can be exploited to the maximum limit only by operating the station

in/-

in combination with the other Kalinadi stations. The difference of elevation between the F.S.L. of the Supa Reservoir and the Tail water level at the lower Kalinadi Station is about 1700 ft., but only about 1550 ft. gross head is reported to be available for power generation, the difference being due to the head lost between Supa Tail Water Level and the F.S.L. of the pick-up reservoir near Bomanhalli. The Kaneri development will utilise the head of about 1200 ft. between the F.S.L. of the Reservoir and C.L. of the turbines.

5. The potentialities for power generation at the four generating stations mentioned above are reported to be of the order of 325,000 kW (continuous) which is equivalent to a firm demand at the power house bus bars of about 540,000 kW at 60% load factor. A plant capacity of 590,000 kW is considered adequate for this purpose.

The annual estimated total output of electrical energy from the system is reported to be 2840 million kilowatt hours, which is estimated about 30% more than the total kW hrs. generated in the Union of India in 1947. The capital cost of the civil works, generating stations and the interconnections between the four power stations is estimated at Rs 3928 lakhs (1948 prices) including interest charges during construction, but excluding land compensation and staff quarters This works out to Rs 666 per kW of installed capacity. According to the Consultants' 7/1-3 letter dated 27-1-1949, this cost per kW is extremely low and makes the complete scheme an attractive one. The cost of electrical energy at the main station at Nagjhiri is estimated at about 0.13 anna per unit which compares very favourably with any other installation in the world.

6. Since there is not likely to be demand for such large blocks of power in the near future in the area, the Consulting Engineers have recommended after careful study of different alternatives, that the Supa Project should be taken up in the initial stage to meet a power demand of about 50,000 kW and an annual firm supply of about 250 million units (plus about 20% additional supply for about 75% of the years, available, if it would permit stoppage in exceptionally dry years, vide 7/1-3 letter of 27-1-1949).

The following reasons have been given for the preference of Supa scheme to be taken up in the first instance and as soon as possible.

(i) The Consultants have already examined the Supa site with greater detail and have taken a few bores at Dam site to determine its suitability for providing the dam.

(ii) After completion of the Supa scheme, two alternatives are possible for further development depending upon the growth of load. If the load development is slow, the Kaneri scheme may be taken up next, but if it is accelerated, the Supa scheme may be followed by the main Nagjhiri scheme.

(iii) Supa dam site is more accessible from both rail heads at Londa and Dandeli and the main Provincial roads in the area.

The estimated cost of Supa development (excluding transmission and distribution) on basis of installed capacity of 60,000 kW is about Rs 870 lakhs (1948 prices).

[illegible] A. will be put up if reqd File No 8340/36 p 194

7. According to U.O.R. No.8340/36/71445, dated 3-1-1949, Government have tentatively decided to avail of the power supply from the Mahatma Gandhi Power Station of the Mysore Government near Jog falls to meet the immediate load demands in the Karnatak area. When Government finally decide on the utilisation of Jog power, the work of survey of transmission line route from Jog to Hubli and other load centres in the Karnatak area will be taken up and orders for transmission lines and substation equipment placed. The quantum of power which the Government of Mysore are prepared to spare for Bombay is limited to 10,000 kW at 110 kV Jog bus bars and 1500 kW at 66 kV bus bars at the border of Bombay and Mysore near Harihar. No large industrial development is possible with such a limited amount of power. The execution of the Kalinadi project will, therefore, have to be taken up in the near future to enable industrial development of this area on a suitable scale being undertaken. I accordingly recommend that detailed survey and exploratory work leading to and preparation of project report of the first stage of Kalinadi development at Supa be taken up from October, 1949.

A

8. The essential field data and preparation of a Scheme including designs and drawings in a form suitable for submission to Government for sanction will take about two to three working seasons. Provided the detailed exploratory work is undertaken from October this year (1949) and on its completion Government sanction development of the Supa Scheme without delay, it is probable that power will be

available from Supa about four years after Jog power becomes available.

9. It may be mentioned that at the Conference of* H.M., PWD, and H.M., Forests & Agriculture, with Mysore Government in Bangalore on 10-2-1949, the Mysore Minister suggested several times that for Bombay's power requirements beyond 11,500 kW, Kalinadi should be developed.

* minutes of this conference may be sought (will be [illegible] up [illegible])

10. During the visit of the Hon'ble the Premier to the Supa dam site on 1-2-1949, he expressed that the investigation for the development of the vast potentiality of the resources of the Kalinadi river should be continued although a limited supply of Jog power may be availed of in the first instance, so that our own potential resources would be available for the development of the Province at the appropriate time.

11. If Government is pleased to accept my recommendation in the latter part of para. 7. above, I shall submit detailed proposals and estimated costs for the proposed work connected with the development of Supa part of the Kalinadi scheme. As considerable preparatory work has to be done before field work can be started in October, next, I shall be obliged for very early orders of Government.

P B Advani
Electrical Commissioner
with the Govt. of Bombay.

Encl: 2.
1. ONE REPORT
1. Copy of the letter No ACE/113/190 dt 27/1/49 from ACE (India)

CPD.
5.III.49.

P. W. D.
File No. 8340/36
Serial No. 16423

I place below for favour of information of H.M.P.W. and Hon'ble ~~the~~ Premier an advance copy of the report on the Kalinadi Hydro Electric Scheme by the Associated Consulting Engineers just received by me.

A Summary of the Conclusions reached is given on pages 8 to 17 of the covering report.

I shall submit to Govt officially in due course a copy of the report ~~when~~ with my remarks thereon.

I shall be obliged if the present copy of the report is kindly returned to me when done with.

P B Advani
14-1-49

H.M. P.W.D.
Bombay
15-1-49

H.P. I think all H.Ms should see & we shd discuss
18/1/49

H.M. Ind,
19/1/49

H.M. LSG
GDV
28-1-49

HM. Irr. & Hw. 5/2/49

HM Lab. 7/2

HM Fin. 8/2/49

HM L-SCSD. 9/2

HM PH & PWD 14/2/49

HM H&Rd 15/2

HM Ex (has seen).

Report on the Hydro Electric Resources of the Kalinadi Basin.

This was discussed at a meeting of H.Ms held on 23rd February 1949 and it was decided that survey of Supa should be started and pushed on.

Id. L.M.P(atil),
24-2-49.

H.M.,P.W.D.

6/3/49

Sec.:

8/3

9/3/49

El. Br. P. W. D.

Submitted with refce. to the Govt. decision on p. 13 ante.

2. The remarks of the El. Commr. refd. to in his note p.11, d. the 14-1-49, have since been recd. in his letter pp. 7-10 within. Therein he proposes that the detailed survey and exploratory work leading to and preparation of project report of the first stage of Kalinadi development at Supa be taken up from October 1949 and requests the orders of Govt. in the matter.

x Vide 'A' on p.9

B

3. No provision has been made for Kalinadi (Supa development) scheme. The El. Commr. has, however, stated in his ltr. No. PF-17 x (IV)/4196, d. the 12-3-49, that the expenditure on Supa during the first five year period, ending the year 1951-52, will be relatively small. In view of this and in view of the decision p.13 already arrived at by Govt., the El. Commr's proposal at "B" above may be accepted, if approved, and he may be asked

x Linked case II file 8535/36(2) pp. 7-8

to

PWR-I

to submit detailed proposals and estimated costs for the proposed work connected with the development of Supa part of the Kalinadi Scheme.

4. Necy. draft p17 is put up for approval.

ASS
29-3-49.

Thro' AB(III) & DE(I)

31/3/49.

A.B.(III)

Preliminary investigation of the Kalinadi Hydro-elec. Project was p177 financed from funds under the head "52-A- Misc. expenditure including Surveys"- Postwar Reconstruction and Dev. Programme". Expenditure relating to the detailed survey in question will be similarly financed. No specific provision for this work has been made in the next year's Budget. The expenditure will therefore either be met from the lump provision of Rs. 1,30,000 made for the next year under the head "52-A" or by a supply. demand. Expenditure on the work may be authorized. The F.D. may see this u.o. before the necy. addition re: funds is made to the proposed draft.

31/3/49.

31/3/49

31.3.49

D.S.

[illegible]

17 Letter. 8340/36/16423

No. 8340/36-El. P. W. D.

B. C., 1st ~~May~~ ~~March~~ June 1949.

To

The El. Commr. with the G. of B

Sub:- Kalinadi development at Supa.

Refce:- Your letter No. ELG-12-D/3855, pp. 7-10, dated the 7-3-1949.

2. Your proposal to take up from October, 1949, the detailed survey and exploratory work leading to and preparation of project report of the first stage of Kalinadi development at Supa is accepted, and you are requested to submit, for the approval of Govt., detailed proposals and estimated cost for the proposed work connected with the development of Supa part of the Kalinadi Scheme.

DA-Nil.

3. — Pl. see c. p. 3 Portion A.

By Order etc.

ABS 29-3-49. Copy forwarded for informn. to the F.D., the R.C.D. and the A.G., B'bay (thro' F.D.)

K 31/3/49

[illegible]

D.S.

Secy (I)

49 31-3-49

u.o. to Fin Deptt. 2-4-49

FINANCE DEPARTMENT
File No. 4
Date 2
Serial No. 69 PWRI

Under G.R.,P.W.D.No.8340/36 dated 28.10.47 an estimate amounting to Rs.1,65,000 was sanctioned for the preliminary investigations and report on the ~~Kaliwadi~~ Kalinadi Hydro-Electric Project. Messrs. Associated Consulting Engineers(India)were entruste with the work of investigations.The Consulting Engineers have submitted their report.The conclusi drawn by them will be found on pages 8 to 17 of the report.The estimated capital cost of the project and the annual cost of operation is mentioned in Chapters XIII and XIV of the report respectively. The Complete scheme costs Rs.3,928 lakhs .The estimated cost of Supa and Kanari schemes separately is Rs.840/- lakhs and Rs.795 lakhs respectively. The annual operation charges for the complete scheme are estimated at Rs.226.98 lakhs and those for Supa and Kaneri schemes at Rs.47.76 lakhs and Rs.44.30 lakhs respectively.The Consultants recommend that the Supa Scheme should be taken up in the initial stage to meet a power demand of about 50,000 K.W.and an annual firm supply of about 250 million units.The P.W.D.accordingly proposes that detailed survey and exploratory wor leading to and preparation of project report of the first stage of Kalinadi development at Supa may be taken up from October 1949.

2. Recently Govt.has decided to execute Jog-~~Kkxxx~~ Karnatak Power Scheme at an estimated cost of about 419 lakhs. It was stated on those papers that the Kalinadi Hydro Electric Scheme was to be substituted by the Jog-Karnatak Power Scheme vide F.D. note of 3.2.49 written on that case. Since the Kalinadi project is now approved for Survey etc. by H.Ms.the F.D.may agree to the proposal.

3. The Electric schemes sanctioned by Govt. so far including the proposed scheme either admvely or for investigations of Surveys. etc. with the estimated total cost are ~~as~~ mentioned below:-

Name of the Scheme.	Total cost of the Project in in lakhs.	Remarks
N.Gujarat Scheme.	222.61	Sanctioned administratively.
Koyna Hydro Electric Project.	3540.00	Sanctioned for Investigation and Survey.
Jog-Power Scheme.	419.00	Govt.has decided to execute this.
Diesel Nursery Schemes.	112.60	Most of these are sanctioned administratively.
South Gujarat Scheme.	301.74	Approved administratively.
Kalinadi Hydro Electric Project.	3928.00	~~Now~~ A part of this is now proposed to be sanctioned for investigation and survey.
Total . Rs.	8523.95.	

If all the schemes are executed completely, the total cost would be about Rs.85 crores. This is a big amount and though the execution of the schemes will be ~~sponsored~~ spread over a long period it is a problem how funds will be found for the schemes if they are to be undertaken simultaneously. It appears that Govt. will have to decide which of the schemes should be undertaken first. Although the present proposal does not involve any large expdre. in the near future, but having regard to the large ultimate expdre. involved, in it, the papers may be submitted to the E.P.C.

N.J.4
19.4.49

DKL
19/4/49

19/4

To be circulated to E.P.C.

β 20/4

[illegible]

IMMEDIATE.

FINANCE DEPARTMENT.

File No. 8340/36/16423 of Public Works Department.

Subject:— Govt. Electric Schemes costing Rs 8523.95 lakhs Relative priority among.

CIRCULATED TO THE

EXPENDITURE PRIORITIES COMMITTEE.

H. M. F. D. 22/4/49

C. S.

Secy. F. D. 21/4

E.P.C. accepts in principle the proposal to undertake detailed survey and exploratory work for the preparation of the project report of Supa Scheme. P.W.D. requested to submit estimates in that behalf in due course.

H.M. 10.5.49.

11/4/49

K Bk Y 27

[illegible] letter P.W.D. Dy 12/57 [illegible].
with file 8340/36 & [illegible]
copy of report –

El. 12/5

P.
8340/36
32145

Filed

MVB
(CLCD

8340/36/32145.

El. Br. P.W.D.

Submitted with refce. to the O.N. pp.15-16 dated the 29-3-49.

2. The F.D. pp.19-20 and E.P.C. 21 having agreed to this deptt. proposal, the draft within p17 may issue after nor. to the R.C.D.

Thro.' AB(II) & DE(S).

ASS
25/5/49.

3. The following para may be added as para 3 to the draft on p17 ante:—

A "3. Expre. on the work in question is authorised in the current plan under "52-A-6/the Revenue Expre. connected with Electricity Schemes-II-Misc. Expre. (including Surveys)." A source will be pointed out in due course."

9/-

25.5.49. 25.5.49

RECONSTRUCTION DEPT.
File No. P.W.D. 8340/36/16423
27 MAY 1949
Serial No. A xxxx

2-45 pm 24

25/5/49

D.S. urgent. ~~+ u.o.~~ to R.C.D. 26-5-49

+ with file No 8340/36 & Report

R.C.D.
Seen & returned u.o. to the PWD

27/5/49

J.C.
27/5

With accompts
(2) docket.

U/35739. 24

El. Br.

P. W. D.

Submitted with refce. to this Deptt.

p23
U.O. d. the 26-5-49.

2. The draft on p. 17 ante with the addition of para 3, as stated overleaf, may now issue.

ABS.
31/5/49.

Thro' AB III.

31-5-49

D.S.

4/3/5

El Br. 30/5

file

P. W. D.
File 8340/36
U 35739

m B

(7 copies
p 17)

-7

Confidential

D.O.No.H.7-14/221.
Electric Grid Offices,
Foreshore Road,
Bombay 1: 9th February, 1950.

Dear Bedekar,

Government had authorised the detailed survey work in connection with the Kalinadi-~~Supa~~ hydro-electric project in their letter p.25 No.8340/36-El. dated 1st June 1949. To carry out this survey work, it was necessary to submit to Government for approval detailed estimates of cost. These have been prepared. As the required staff is not likely to be had from the P.W.D. or recruited from outside easily, I made enquiries from the Consulting Engineers who carried out preliminary survey of Kalinadi for this Department. I was addressing a letter to Government in this matter by sending up estimates for the Departmental work and alternatively for work to be carried out through the agency of Messrs. Associated Consulting Engineers(India). H.M.P.W.D. during the discussions on the 8th instant, however, desired that I should not submit these proposals at this stage, but may do so in the month of June next. I shall act accordingly.

9/2

Yours sincerely,

P B Advani

G. V. Bedekar, Esqr., I.C.S.,
Secy. to Govt., P.W.D., Bombay.

Letter.

No. 8340/36-El.. Public Works Department.
Bombay Castle, 1st June 1949.

To

The Electrical Commissioner with the Government of Bombay,

Subject:- Kalinadi development at Supa.

•••••

- p.7

Reference:- Your letter No. ELC-12-D/3083, dated the 7th March 1949.

2. Your proposal to take up from October 1949, the detailed survey and exploratory work leading to and preparation of project report of the first stage of Kalinadi development at Supa is accepted, and you are requested to submit, for the approval of Government, detailed proposals and estimated cost for the proposed work connected with the development of Supa part of the Kalinadi Scheme.

3. Expenditure on the work in question is authorised in the current year under "52-A-Other Revenue Expenditure connected with Electricity Schemes-II-Miscellaneous Expenditure (including surveys)". A source will be pointed out in due course.

By order of the Governor of Bombay,

for Secretary to the Government of Bombay,
Public Works Department.

D.A.-Nil.

Copy forwarded for information to -

the Finance Department,

the Reconstruction Department,

the Accountant General, Bombay (through the Finance Department).

ISSUED

FAJai/1-6-49.

Orders issued after consultation with
Finance Department.
Notes remain with this Department and can be seen when required.

8340/36/35739

El Br (I)   P.W.D.

[illegible]

P.

28/12

The Elecl. commr expedited under No 8340/36-El dated the ~~December 1949.~~ 3rd Jan. 1950

Issued
3/1/1950

Rof
31/12/49

3/1/50

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29

8340/36/10741

El.Br.(I)

P.W.D.

Submitted for information with reference to G.L. No. 8340/36-El, dated the 1-6-49. p.25

Await.

~~23~~ 24-3-50

K 24/3/50

DS

[illegible]

25/3 [illegible]

31

Very Urgent:
Reminder-II.

No.H7-3/19006
Electric Grid Offices,
Foreshore Road,
Bombay 1: 16 Nov.1949.

To
The Secretary to Government,
P. W. D., Bombay.

Subject: Kalinadi Hydro Electric Project.--
Preliminary Investigations.

Reference: Letters Noss (1) Elg.12-A/12507 dated 29.7.49
and (2) H7-3/14147 of 27-8-49.

In continuation of my above letters, I request you to move the Government to sanction as early as possible the revised estimate amounting to Rs.2,28,900/- in connection with the preliminary investigations on the Kalinadi H.E. Scheme as Messrs. Associated Consulting Engineers (India), Bombay, are pressing for payment for the work completed by them.

P B Advani
Electrical Commissiner
with the Government of Bombay.

P/15.11.
AHS
15/11

3

8340/36/76772.

El. Br. I.   P. W. D.

The main file, recently recd. from the F.D., has been subtd. to day with the necy. draft G.R. for approval, and orders will issue shortly. The El. Commr. may see this note no. for his informn. and return.

ASO.
20-11-49.
21

DS

21/11/49
23/11

U.O. to the El Commr. dy 22nd Nov 1949.

Seen & returned with Compts.

Secty Govt
PWD

PSA. 24/11/49

U.O. NO: H-7/3/19774 of 26.11.49

GR No

[illegible]

in file

E1(1)29/11

P. W. D.
File No. 83401366
Serial No. 80382

FP [illegible]

5/12

MD

[illegible] - 11 - [illegible]

35

8340/36/80382.

El. Br. I. P. W. D.

Necy. orders with refce. to the El. Commr's. letter on p. 1 ante have since been issued in G.R. No 8340/36, d. the 28-11-49. The main file (No 8340/36/73864), containing the above G.R., is separately under submission. No action is necy. on these papers beyond attaching them to the main file, when it becomes available.

ASB.
10-12-49

AAs

12/12

File
12/12

8340/36

37

P.W.D

AB(III).

File No. 8340/36 regarding Kalinadi Hydro-Electric Scheme has been refd. u.o. to the F.D. on the 26-10-50. It is required immediately for putting up the Scheme as a new-item for 1951-52. T[illegible] F.D may therefore be requested to return it immediately with its remarks.

Thro' El. Br (I)

D.. 7/11/50

WR I
8-11-50
~~102576~~
102605
6/11/50

6/11/50.

Immediate -

U.O. to the F.D. dt 7 Nov. 1950.

Issue u.o.
7/11/50

Fin. Deptt.

P.W.D.

The main pps. are being returned to-day. This may also be returned to P.W.D.

13/11/50

14/11

A.S.(J).

A(III) 15/11

Sr. 14/11

U.O.R. to the P.W.D. dt. 14.XI.50

—o—

P. W. D.
File No. 8340/36
Serial No. 93484
A.B. III.
14-11-50

AB(III).

P.W.D.

The file in question has since been recd. back and dealt with separately.

AB
17/11/50

Record.
18/11/50

Recd
20/11

S.A. Ceey.

Regn.
Pl. returned